

Title (en)

Sputtering target and its use in the production of an optical recording medium

Title (de)

Sputtertarget und dessen Verwendung bei der Herstellung eines optischen Aufzeichnungsmediums

Title (fr)

Cible de pulvérisation et son utilisation pour la fabrication d'un support d'enregistrement optique

Publication

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Application

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Priority

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Abstract (en)

A sputtering target contains a target material including as constituent elements Ag, In, Te and Sb with the respective atomic percents (atom.%) of α , β , γ and δ thereof being in the relationship of $0.5 \leq \alpha < 8$, $5 \leq \beta \leq 23$, $17 \leq \gamma \leq 38$, $32 \leq \delta \leq 73$, $\alpha \leq \beta$, and $\alpha + \beta + \gamma + \delta = 100$, and a method of producing the above sputtering target is provided. An optical recording medium includes a recording layer containing a phase-change recording material which includes as constituent elements Ag, In, Te and Sb with the respective atomic percents of α , β , γ and δ thereof being in the relationship of $1 \leq \alpha < 6$, $7 \leq \beta \leq 20$, $20 \leq \gamma \leq 35$, $35 \leq \delta \leq 70$, and $\alpha + \beta + \gamma + \delta = 100$, and is capable of recording and erasing information by utilizing the phase change of the recording material in the recording layer. A method of forming the above recording layer for the optical recording medium is also provided. In addition, there is provided an optical recording method using the above-mentioned phase-change optical recording medium.

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